

Translation

PATENT COOPERATION TREATY

PCT/JP2003/015613



PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference JHTK-59-PCT	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/JP2003/015613	International filing date (<i>day/month/year</i>) 05 December 2003 (05.12.2003)	Priority date (<i>day/month/year</i>) 05 December 2002 (05.12.2002)
International Patent Classification (IPC) or national classification and IPC C08J 5/18, G11B 7/24, B32B 27/30// C08L 101:00		
Applicant HITACHI CHEMICAL CO., LTD.		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>	
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>	

Date of submission of the demand 04 June 2004 (04.06.2004)	Date of completion of this report 30 September 2004 (30.09.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/015613

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:

- ☐ international search (under Rules 12.3 and 23.1(b))
☐ publication of the international application (under Rule 12.4)
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☒ The international application as originally filed/furnished

☐ the description:

pages _____, as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☐ the claims:

pages _____, as originally filed/furnished

pages* _____, as amended (together with any statement) under Article 19

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☐ the drawings:

pages _____, as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing (*specify*): _____

☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing (*specify*): _____

☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP03/15613

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	3, 4, 6, 7, 9-24, 26, 28, 30, 33, 35, 36, 38, 42, 43	YES
	Claims	1, 2, 5, 8, 25, 27, 29, 31, 32, 34, 37, 39-41	NO
Inventive step (IS)	Claims		YES
	Claims	1-43	NO
Industrial applicability (IA)	Claims	1-43	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Document 1; EP, 1006395, A1 (Dai Nippon Printing Co., Ltd.), 07 June 2000.
 Document 2: JP, 2002-012624, A (JSR Corp.), 15 January, 2002.
 Document 3: EP, 1187118, A2 (Sony Corp.), 13 March, 2002.
 Document 4: JP, 2002-230854, A (Sony Corp.), 16 August, 2002.
 Document 5: JP, 2000-067468, A (Teijin, Ltd.), 03 March, 2000.
 Document 6: JP, 2001-243659, A (Teijin, Ltd.), 09 July, 2001.
 Document 7: JP, 2000-273319, A (Hitachi Chemical Co., Ltd.), 10 March, 2000.
 Document 8: JP, 2002-038036, A (Hitachi Chemical Co., Ltd.), 02 June, 2002.

The inventions of claims 2, 5, 8, 27 are described in document 1 cited in the ISR and, therefore, do not appear to possess novelty. Document 1 describes a filter for a liquid-crystal display device composed of an acrylic polymer. According to FIG. 5 and FIG. 7 of document 1, the $\tan\delta$ value at a temperature of 30°C to 80°C of the film exceeds 0.04. Therefore, this optical film clearly satisfies the requirement that the integral value of $\tan\delta$ be ≥ 2 , as described in claim 1 of the subject application.

The inventions of claims 1, 2, 25, 27, 29 are described in document 2 cited in the ISR and, therefore, do not appear to possess novelty. Document 2 describes an optical film that is composed of a cyclic olefin polymer and can be advantageously used for an optical disk. According to FIG. 1 of document 2, the $\tan\delta$ value at a temperature of 30°C to 80°C of the film exceeds 0.04. Therefore, this optical film clearly satisfies the requirement that the integral value of $\tan\delta$ be ≥ 2 , as described in claim 1 of the subject application.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of Box V:

The inventions of claims 31, 32, 34, 37, 39 to 41 are described in documents 3, 4 cited in the ISR and, therefore, do not appear to possess novelty. Documents 3, 4 describe that it is important to match thermal expansion coefficients of the substrate and light transparent layer constituting the optical disk in order to prevent the disk from warping. Furthermore, they also disclose that an acrylic resin is used for the light transparent layer, the birefringence factor is small, the transparent layer is bonded to the substrate via an adhesive agent layer, a polycarbonate is used as the substrate material, and a PET parting film is bonded to the transparent layer.

The inventions of claims 1 to 5, 7 to 29, 35, 36, 42 do not appear to involve an inventive step based on documents 1 to 6 and documents 7, 8 cited in the ISR. Documents 7, 8 disclose a resin material comprising a vinyl polymer having a proton-donating atom association and a vinyl polymer having a proton-receiving atom association, wherein pseudo-crosslinking caused by hydrogen bonds is formed there between, this material being used as a material for an optical film having high optical transparency. Therefore, using this material for well-known optical applications disclosed in documents 1 to 6 could have easily been devised by a person skilled in the art.

The inventions of claims 6, 38 do not appear to involve an inventive step based on documents 1 to 8. Blending well-known additives into the transparent layer could have easily been done, if necessary, by a person skilled in the art, as described, for example, in documents 7 and 8.

The inventions of claims 30, 33, 43 do not appear to involve an inventive step based on documents 1 to 8 cited in the ISR. Employing a well-known material designed for optical disks of another high-density recording type, while adjusting optical characteristics thereof, could have easily been attempted by a person skilled in the art.